Amendments to the Drawings:

The attached sheet of replacement drawings include changes to FIG. 1. The attached sheet for FIG. 1 replaces the original sheet and is corrected to show that the low speed bus arbiter in the IO controller communicates information through the IO controller to the system controller if desired.

Attachment: Replacement Sheet

REMARKS

Applicants respectfully traverse and request reconsideration.

As a preliminary matter, if any of the rejections are maintained, Applicants respectfully request withdrawal of the finality of the rejection since it does not reject claim 23 or claim 21 nor indicate their allowance (nor did the previous office action). Applicants specifically noted that claim 23 was not rejected in their previous response. As such, if the Patent Office continues to reject the claims, any response should be a non-final action as Applicants have never been given an opportunity to respond to any rejection with respect to claims 23 and 21.

The drawing is objected to. Applicants submit a new drawing showing that the low speed bus arbiter in the IO controller communicates information through the IO controller to the system controller if desired.

Claims 18-20 stand rejected under 35 U.S.C. §103(a) as being unpatentable over the combination of U.S. Patent No. 5,727,171 (Iachetta Jr.), U.S. Patent No. 6,295,568 (Kelley et al.) and U.S. Patent No. 5,392,407 (Heil et al.). In the Response to Arguments section of the final action, the office action appears to fail to address some of Applicants' previous arguments. As such, Applicants respectfully reassert that the claims are in condition for allowance at least since the input/output controller as claimed is coupled to the high speed bus arbiter and that of Iachetta is not. According to the final action, the high speed bus arbiter 710 of Iachetta would be coupled to the IO controller which is said to be 810 in the office action. However, the arbiter 710 is not coupled to the PCI bridge 810 in any manner and instead is isolated from the bus bridge through devices 690 and 700. Accordingly, the claim is in condition for allowance for this reason alone. As such, the combination with other references cannot render the claimed invention obvious.

For argument sake, Applicants also wish to address the statements with respect to the Kelley reference. The Kelley reference is directed to a method and system that utilizes bus segments separated by switches (see for example, claim 1 of Kelley as well as column 2, lines 20-30). An object of Kelley is to use "a single PCI host bridge to support multiple PCI buses thus minimiz[ing] the number of required bridges" (column 2, lines 15-19). The office action cites FIG. 3 of the Kelley reference as allegedly teaching integrating each arbiter into a respective system controller or IO controller. It is also submitted in the office action that one would be motivated to combine the Kelley arbiter and single bridge structure into the system of Iachetta. Applicants respectfully submit that Kelley actually teaches away from the system of Iachetta. Kelley teaches to use a single bridge with switching logic in a bus configuration to avoid multiple bridges. In contrast, Iachetta teaches using multiple bridges (see for example, host bridge 640 and bus bridge 810). Kelley specifically attempts to provide a system different from that of Iachetta. Accordingly, one of ordinary skill in the art would not be motivated to combine their teachings.

Even if one were to combine the teachings of Kelley with that of Iachetta, as best understood, the result would be a single host bridge with switching logic and no need for the claimed IO controller as the office action alleges that the IO controller includes 810 of Iachetta whereas Kelley teaches to remove an IO controller. As such, there would be no motivation to combine disparate teachings. For this reason also, the claims are in condition for allowance.

Claims 19 and 20 also add additional novel and non-obvious subject matter.

Claim 22 stands rejected under 35 U.S.C. §103(a) as being unpatentable over the combination of Iachetta and Kelley. Applicants respectfully reassert the remarks made above with respect to Iachetta and Kelley and as such, this claim is also in condition for allowance.

Accordingly, Applicants respectfully submit that the claims are now in condition for allowance and that a timely Notice of Allowance be issued in this case. The Examiner is invited to contact the below-listed attorney if the Examiner believes that a telephone conference will advance the prosecution of this application.

Respectfully submitted,

Dated: 7/5/05

y: _____

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